CLAIMS

It is claimed that:

1. A re-selection method for switching a packet data session from a first packet data channel in one cell of a cellular communication network to a second packet data channel in another cell comprising:

beginning a packet data session on a packet data channel in a first cell of said network;

during said packet data session, monitoring the channel quality of adjacent control channels in adjacent cells;

identifying one or more adjacent control channels as potential re-selection candidates;

reading at least part of the broadcast information on the control channel identified as a re-selection candidate while engaged in said packet data session and prior to initiating a re-selection procedure;

when a predetermined re-selection criteria is met, switching to a new packet data channel in the cell corresponding to a selected one of said re-selection candidates;

resuming the packet data session on said new packet data channel.

2. The re-selection method of claim 1 wherein the re-selection criteria is based upon a signal quality measure.

3. The re-selection method of claim 2 wherein the signal quality measure is a measure of received signal strength on the control channel.

4. The re-selection method of claim 3 wherein an adjacent control channel is identified as a re-selection candidate based upon the received signal strength of the control channel.

5. The re-selection method of claim 4 wherein an adjacent control channel is identified as a re-selection candidate when it is one of the n strongest control channels that are being monitored.

6. The re-selection method of claim 4 wherein an adjacent control channel is identified as a re-selection candidate when the received signal strength reaches a predetermined threshold.

7. A re-selection method comprising:

beginning a communication session on a traffic channel in a first cell;

during said communication session, reading at least part of the broadcast information on the adjacent control channels in one or more adjacent cells that are identified as potential re-selection candidates;

when a predetermined re-selection criteria is met, switching to a new traffic channel in the cell corresponding to a selected one of said re-selection candidates; and

resuming the packet data session on said new packet data channel.

8. The re-selection method of claim 7 wherein the re-selection criteria is based upon a signal quality measure.

9. The re-selection method of claim 8 wherein the signal quality measure is a measure of received signal strength on the control channel.

10. The re-selection method of claim 9 wherein an adjacent control channel is identified as a re-selection candidate based upon the received signal strength of the control channel.

11. The re-selection method of claim 10 wherein an adjacent control channel is identified as a re-selection candidate when it is one of the n strongest control channels that are being monitored.

12. The re-selection method of claim 10 wherein an adjacent control channel is identified as a re-selection candidate when the received signal strength reaches a predetermined threshold.

13. The re-selection method of claim 1 wherein said reading comprises reading, from said control channel identified as a re-selection candidate, at least one of items selected from the group consisting of system identification information, channel-specific access parameters, protocol parameters, neighbor list for that cell, the corresponding serving cell's coincidental DCCH pointers, and routing area identity.

14. A re-selection method comprising:

beginning a communication session on a traffic channel in a first cell;

during said communication session, reading at least part of the broadcast information on the adjacent control channels in one or more adjacent cells that are identified as potential re-selection candidates;

when a predetermined re-selection criteria is met, switching to a new traffic channel in the cell corresponding to a selected one of said re-selection candidates;

resuming the packet data session on said new packet data channel; and

wherein said reading comprises reading, from said control channels identified as potential re-selection candidates, at least one of items selected from the group consisting of system identification information, channel-specific access parameters, protocol parameters, neighbor list for that cell, the corresponding serving cell's coincidental DCCH pointers, and routing area identity.